

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of claims:

1-39. (Canceled)

40. (New) The process for regeneration of a catalyst based on a zeolite, employed in an acylation reaction, comprising the step of sending a hot gaseous stream of molecular oxygen or a gas containing it over a catalyst which is a zeolite modified by addition of an effective catalyst quantity of at least one element M selected from the group consisting of ruthenium, rhodium, palladium, osmium, iridium and platinum.

41. (New) The process according to Claim 40, wherein the catalyst is a zeolite modified with the metallic element M used in a quantity such that the percentage by weight of the metal M relative to the zeolite is between 0.1 % and 25 %

42. (New) The process according to one of Claim 41, wherein the percentage by weight of the metal M relative to the zeolite is between 3 % and 15 %.

43. (New) The process according to Claim 40, wherein the zeolite is a natural or synthetic zeolite.

44. (New) The process according to Claim 43, wherein the zeolite is a natural zeolite selected from the group consisting of chabazite, clinoptilolite, erionite, mordenite, phillipsite and offretite.

45. (New) The process according to Claim 43, wherein the zeolite is a synthetic zeolite selected from the group consisting of:

- synthetic zeolites with a one-dimensional network;
- zeolites with a two-dimensional network; and
- zeolites with a three-dimensional network.

46. (New) The process according to Claim 45, wherein:

- the synthetic zeolite with a one-dimensional network is selected from the group consisting of zeolite ZSM-4, zeolite L, zeolite ZSM-12, zeolite ZSM-22, zeolite ZSM-23 and zeolite ZSM-48;
- the zeolite with a two-dimensional network is selected from the group consisting of zeolite β , mordenite and ferrierite;
- the zeolite with a three-dimensional network is selected from the group consisting of such as zeolite Y, zeolite X, zeolite ZSM-5, zeolite ZSM-11 and offretite

47. (New) The process according to Claim 46, wherein the zeolite is a zeolite β and Y.

48. (New) The process according to Claim 40, wherein the zeolite is deposited on the zeolite by precipitation or impregnation by a dry or wet route.

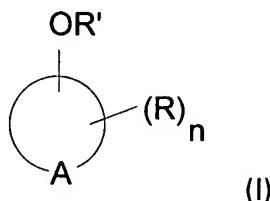
49. (New) The process according to Claim 40, wherein the gaseous stream is pure oxygen, oxygen diluted with an inert gas, or air.

50. (New) The process according to Claim 40, wherein the gaseous stream is at a temperature of between 100°C and 250°C.

51. (New) The process according to Claim 40, wherein the regenerated catalyst is reemployed in an acylation reaction of an aromatic ether with an acylating agent.

52. (New) The process according to Claim 51, wherein the aromatic ether

corresponds to the general formula (I):



wherein:

- A symbolizes the cyclic residue of a ring forming all or part of a monocyclic or polycyclic aromatic carbocyclic system, the system including at least one OR' group, the said cyclic residue optionally carrying one or more substituents,
- R denotes one or a number of identical or different substituents,
- R' denotes a hydrocarbon radical containing from 1 to 24 carbon atoms, which may be a linear or branched, saturated or unsaturated, acyclic aliphatic radical, a saturated or unsaturated cycloaliphatic or monocyclic or polycyclic aromatic radical, or a linear or branched, saturated or unsaturated, aliphatic radical carrying a cyclic substituent,
- n is a number smaller than or equal to 4.

53. (New) The process according to Claim 52, wherein the aromatic ether

corresponds to the general formula (I) in which R' denotes:

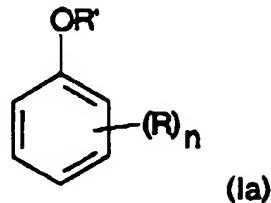
- a linear or branched alkyl radical containing from 1 to 12 carbon atoms the hydrocarbon chain being optionally interrupted by a heteroatom, a functional group or to carry a substituent,

- a linear or branched, saturated or unsaturated, acyclic aliphatic radical carrying an optionally substituted cyclic substituent, the said acyclic radical being optionally linked to the ring by a valence bond, a heteroatom or a functional group,
- a carbocyclic radical which is saturated or includes 1 or 2 unsaturations in the ring, containing from 3 to 8 carbon atoms, the said ring being optionally substituted,
- a monocyclic aromatic carbocyclic radical containing at least 4 carbon atoms in the ring, the said ring being optionally substituted.

54. (New) The process according to Claim 53, wherein the aromatic ether corresponds to the general formula (I) in which R' denotes a linear or branched alkyl radical containing from 1 to 4 carbon atoms or a phenyl radical.

55. (New) The process according to Claim 52, wherein the aromatic ether corresponds to the general formula (I) in which the residue A denotes the residue of a monocyclic aromatic carbocyclic compound containing at least 4 carbon atoms or the residue of a polycyclic carbocyclic compound, the residue A optionally carrying one or more substituents on the aromatic nucleus.

56. (New) The process according to one of Claim 52, wherein the aromatic ether corresponds to the formula (Ia):



wherein:

- n is a number smaller than or equal to 4,
- the radical R' denotes a linear or branched alkyl radical containing from 1 to 6 carbon or a phenyl radical,
- the radical R is selected from the group consisting of:
 - a hydrogen atom,
 - a linear or branched alkyl radical containing from 1 to 6 carbon atoms,
 - a linear or branched alkoxy radical containing from 1 to 6 carbon atoms,
 - a halogen atom, and
 - a trifluoromethyl radical,
- the radicals R' and R and the 2 successive atoms of the benzene ring can together form a ring containing from 5 to 7 atoms, optionally including another heteroatom.

57. (New) The process according to Claim 56, wherein the aromatic ether corresponds to the formula (Ia) in which n is greater than or equal to 1, the radicals R' and R and the 2 successive atoms of the benzene ring are linked together by an

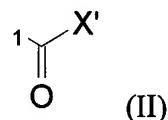
alkylene, alkenylene or alkenylidene radical containing from 2 to 4 carbon atoms to form a saturated, unsaturated or aromatic heterocyclic ring containing from 5 to 7 carbon atoms, in which one or more carbon atoms is replaced by a heteroatom.

58. (New) The process according to Claim 57, wherein the radicals R' and R form a methylenedioxy or ethylenedioxy radical.

59. (New) The process according to Claim 57, wherein the aromatic ether corresponds to the formula (Ia) wherein n is equal to 1, the radicals R and R' both denoting identical or different alkoxy radicals.

60. (New) The process according to Claim 51, wherein the aromatic ether is anisole or veratrole.

61. (New) The process according to Claim 51, wherein the acylating agent corresponds to the formula (II):



wherein:

- R_1 is selected from the group consisting of:

- a linear or branched, saturated or unsaturated, aliphatic radical containing from 1 to 24 carbon atoms, a saturated, unsaturated cycloaliphatic,
- a monocyclic or polycyclic aromatic radical containing from 3 to 8 carbon atoms, and
- a linear or branched, saturated or unsaturated, aliphatic radical carrying a cyclic substituent,

- X' is selected from the group consisting of:

- a halogen atom,
- a hydroxyl group,
- a radical $-O-CO-R_2$ with R_2 , identical or different from R_1 having the same meaning as R_1 , R_1 and R_2 optionally forming together a linear or branched, saturated or unsaturated aliphatic divalent radical containing at least 2 carbon atoms.

62. (New) The process according to Claim 61, wherein the acylating agent corresponds to the formula (II) in which X' denotes a chlorine atom and R_1 denotes a linear or branched alkyl radical containing from 1 to 12 carbon atoms, the hydrocarbon chain being optionally interrupted by a heteroatom or by a functional group or to carry a substituent, R_1 denotes an optionally substituted phenyl radical, or X' denotes a radical $-O-CO-R_2$ in which R_1 and R_2 are identical and denote an alkyl radical containing from 1 to 4 carbon atoms.

63. (New) The process according to Claim 62, wherein the acylating agent is selected from the group consisting of acetic anhydride, propanoic anhydride, isobutyric anhydride, trifluoroacetic anhydride, benzoic anhydride, acetyl chloride, monochloroacetyl chloride, dichloroacetyl chloride, propanoyl chloride, isobutanoyl chloride, pivaloyl chloride, stearoyl chloride, crotonyl chloride, benzoyl chloride, chlorobenzoyl chlorides, p-nitrobenzoyl chloride, methoxybenzoyl chlorides, naphthoyl chlorides, and acetic acid.